



**Granite City Division** National Steel Corporation 20th & State Streets Granite City, Illinois 62040 (618) 451-3456

May 30, 1988

CERTIFIED MAIL NO. P 089 593 838 RETURN RECEIPT REQUESTED

Mr. Tom Powell Emergency Response Specialist Illinois Environmental Protection Agency 2009 Mall Street Collinsville, Illinois 62234

COLLINSVILLE OFFICE Spent Pickle Liquor Spill at Granite City Steel Waste Acid Accumulation Tanks, May 2, 1989 National Response Center No. 6692, Illinois ESDA No. 890717

Dear Mr. Powell:

The following information is being provided in accordance with requirements under 35 Ill. Admin. Code, Section 725.296 regarding final cleanup of the above referenced incident.

> Date and Time: - May 2, 1989 at approximately 8:30 P.M.

Type of Material - Spent Pickle Liquor (K062)

- Approximately 1500 Ft<sup>2</sup> Area of Spill

- Approximately 150 Gallons Amount Spilled

A total of approximately thirty-five yards (35 Yd<sup>3</sup>) of lime neutralized material has been excavated and temporarily stockpiled by Heritage Remediation/Engineering, Inc. of St. Louis pending transportation by a licensed waste hauler to Peoria Disposal Company's RCRA Landfill. The excavated area was sampled (0-6" depth) in accordance with IEPA's recommended grid pattern regarding sample location (see attached sketch). A total of ten (10) samples were collected and analyzed using IEPA general water quality standards as cleanup criteria. Laboratory analysis was performed by Industrial Testing Laboratories, Inc., St. Louis, Missouri, and all samples showed values less than the established limits. Sample results are as follows:

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		Total Chromium	Lead
Sample #	pH (10% Dil.)	(E.P. Tox)	(E.P. Tox)
1	9.2 su	<0.05 mg/l	<0.1 mg/1
2	9.6	<0.05	<0.1
3	9.0	<0.05	<0.1
4	9.6	<0.05	<0.1
5	8.6	<0.05	<0.1
6	9.8	<0.05	<0.1
7	9.6	<0.05	<0.1
8	9.3	<0.05	<0.1
9	9.0	<0.05	<0.1
10	9.2	<0.05	<0.1

The excavated area has been backfilled with blast furnace slag (CA 6 Grade).

As was indicated during your site visit, the spill was caused by a valve being left open while pickle liquor was being pumped back to the pickle line. In an effort to prevent recurrence of a spill incident, the following Standard Operating Procedures (SOP's) are being revised:

- . SOP for draining spent pickle liquor from the pickle line to the waste acid tank system.
- . SOP for recharging pickle line tanks from waste acid tank system.
- . SOP for ensuring proper inspection, repair and maintenance of spent pickle liquor handling system.

In addition, an SOP is being developed which will specifically address tank system to truck transfer of spent pickle liquor. Included in that SOP is a lockable valve at the terminal end of the discharge line used to transfer pickle liquor to the tank truck. This valve will prevent a recurrence of the subject spill.

If you have any questions or require further information regarding any of the above, please feel free to call me at 451-3013.

Very truly yours,

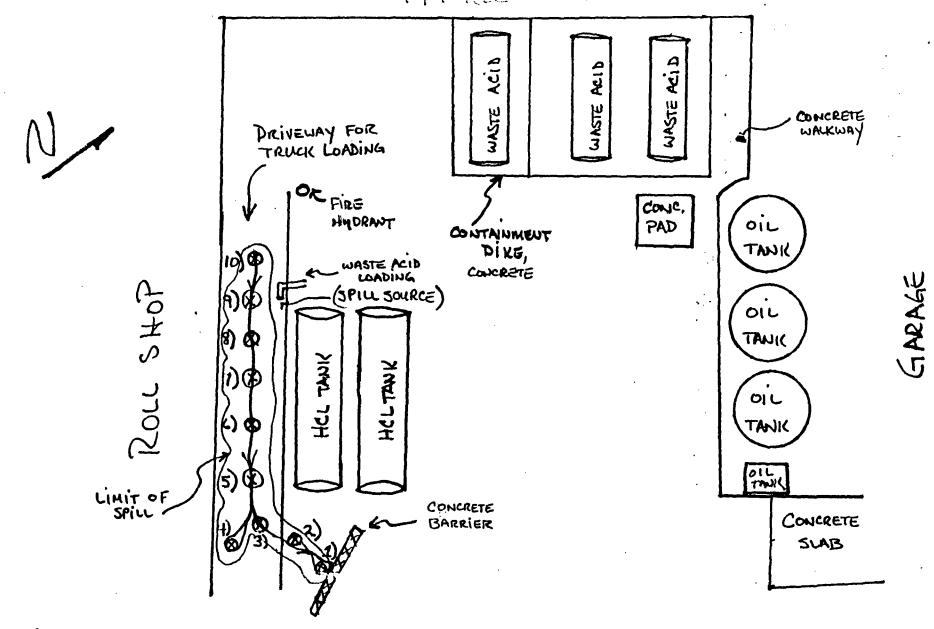
Carl E. Cannon

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cc: Mr. Lanny Darr, w/Att.

Madison County Emergency Services Planning Committee
201 Hillsboro Avenue
Edwardsville, Ill. 62025
Cert. Mail No. P 089 593 839

Ms. Louise Wade, w/Att.
City of Granite City
Emergency Services and Disaster Agency
2330 Madison Avenue
Granite City, Ill. 62040
Cert. Mail No. P 089 593 840



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GRANITE CITY STEEL - WASTE ACID (KOLZ) SPILL

NO SCALE &= SAMPLE POINT 5-2-89

SAMPLE INTERVAL = 11 FT

AREA OF SPILL = ~ 1500 FT<sup>2</sup>

### ATTACHMENT 1

## SPENT PICKLE LIQUOR

The Company is reclaiming a material, Spent Pickle
Liquor. The Company generates HCl and H2SO4 spent pickle
liquors. The HCl spent pickle liquor is handled as follows:

## HCl Spent Pickle Liquor

HCl Spent Pickle Liquor is gravimetrically fed to three 10,000-gallon fiberglass tanks. The tanks are located approximately 1 ft. above the ground and are surrounded by a 3- to 4-ft. dike. The diked area is sufficient to contain the entire contents of all three tanks. The pickle liquor is pumped into tank trucks and taken to a local industry to be reclaimed. Under normal operations, approximately three tank trucks of the spent pickle liquor are removed daily. This equates to approximately 15,000 gal./day, which is the amount of HCl spent pickle liquor generated daily. This material is generally stored in the tanks for approximately 24 hours.

The H<sub>2</sub>SO<sub>4</sub> Spent Pickle Liquor is handled as follows:

# H<sub>2</sub>SO<sub>4</sub> Spent Pickle Liquor

Sulfuric acid spent pickle liquor is generated by a batch pickling process at approximately 8,000-10,000 gal./month. When the  $\rm H_2SO_4$  pickling solution becomes

spent, it is removed from the batch tank by pumping directly into a tank truck. The storage time of the spent pickle liquor in the process tank prior to removal is generally less than one day. The spent pickle liquor is then taken to a local industry for reclamation.

Once the above-described materials are in storage, they will remain there usually under 24 hours and always less than 90 days. The Company does not now discard the material.

Nevertheless, the Company is in compliance with RCRA 40 CFR 262.34 (Accumulation time), 262.40 (Recordkeeping), and 262.41 (Annual reporting). The plant personnel involved in this area have been trained, a contingency plan has been initiated, a preparedness and prevention plan is in operation, and the storage area is inspected weekly.

While the Company does not discard these materials, it is meeting RCRA standards applicable to a hazardous waste being reclaimed off-site in less than 90 days. The manifesting, marking, labeling, placarding, inspection, training, contingency plan, preparedness and prevention plan, recordkeeping and reporting requirements have been met with respect to these materials.

The materials are being beneficially reclaimed. The Company does not believe that either Chapter 7 or Chapter 9

of the Pollution Control Board's Regulations is applicable to the above-described operations and materials.

#### DECANTER TANK TAR SLUDGE

The Company is reclaiming a material, Decanter Tank Tar Sludge. The material is handled as follows:

Decanter Tank Tar Sludge is continuously removed from the tar decanter tanks by means of a chaindriven paddle system, which drags or scrapes the tar sludge from the bottom of the tank and into a two-wheeled buggy. The material is manually shoveled from the buggy and placed into plasticlined kraft paper bags. Approximately 20-30 pounds is placed into each bag. The bags are placed on a wooden pallet and taken manually or by forklift to the coke oven battery. The bags are then charged to the ovens to reclaim the tar and carbon units from the material. The amount of time elapsed from placing the material into bags to charging into the coke ovens is normally not more than 8 hours. An average of approximately 1,600 lbs./battery of decanter tank tar sludge is generated daily.

The present handling procedures for this material do not constitute storage, and thus RCRA 40 CFR 261.6b requirements do not apply.

The Company does not now dispose of this continuously generated material, but has properly disposed of this material when tank clean-outs were required. When this occurs, the material is sent to an IEPA-permitted hazardous waste landfill, and all manifesting, marking, labeling, placarding, recordkeeping and annual reports requirements are met.

The Company is beneficially reclaiming the material.

The Company does not believe that either Chapter 7 or

Chapter 9 of the Pollution Control Board's Regulations is applicable to the above-described operation and material.

### ARGON STIRRING STATION BAGHOUSE DUST

The Company is reclaiming a material, Argon Stirring Station Baghouse Dust. This material is handled as follows:

This dust is generated at the Continuous Caster by the stirring of molten steel with Argon gas prior to casting. Approximately 1/4 to 1/3 yd. 3/day is generated from this process. After the dust is collected in a baghouse, it is fed automatically by screw conveyor into a 4 yd. 3 closed-top dust box or into 55-gal. drums. Both the drums and dust box are labeled or marked with the words "Hazardous Waste".

The material is then taken to the Sinter Plant to reclaim its iron and carbon units. The dust is fed to the Sinter Plant by means of a track hopper, which also feeds the other raw materials used in the sintering process. The storage time of the dust prior to reclamation is less than 90 days.

The personnel training program and contingency plan for this material are being implemented in compliance with the requirements of 40 CFR 262.34.

The Company is beneficially reclaiming the material.

The Company does not believe that either Chapter 7 or

Chapter 9 of the Pollution Control Board's Regulations is

applicable to the above-described operation and material.